IN THE SPECIFICATION

Please amend the specification as follows:

Page 10, second full paragraph:

In the charged state of the lead accumulator 1, the lead electrode 5 is negatively charged with respect to the lead dioxide electrode 6. The magnitude of this negative potential is basically sufficient to reduce the hydronium ions to hydrogen while forming gas at the lead electrode 5. At the sponge-like porous lead coating of the lead electrode 5, ~~however, occurs~~ a large hydrogen surge occurs, which is sufficient to inhibit the undesirable reaction.

Paragraph bridging pages 10 and 11:

In the shown exemplary embodiment, the first electrode 11 and the second electrode 19 are made of platinum. Platinum has a comparatively insignificant hydrogen surge so that, when the electrodes 11, 19 make contact with the aqueous sulphuric acid 4, a gaseous hydrogen is electrochemically generated, which rises within the immersion tubes 9, 10 and pushes the sulphuric acid 4 ~~[sic = 7]~~ out of the interior of the immersion tubes 9, 10 until a first assigned gas depth 21 or a second gas depth 22 of the immersion tubes 9, 10 has been reached. The gas depth 21 or 22 is the depth measured from the surface of the sulphuric acid 4 up to which the immersion tube 9, 10 can be filled with gas before it exits out of the corresponding immersion tube 9 or 10, and rises to the surface in the form of bubbles by overcoming the corresponding hydrostatic pressure of the sulphuric acid 4.

Page 12, second full paragraph:

The charge state of the lead accumulator 1 can be calculated with ~~known~~ the known density and temperature of the sulphuric acid 4. Therefore, the temperature sensor 8 and the differential pressure sensor 16 are connected via a temperature measuring line 23 or via a differential pressure measuring line 24 with a data processing 25. The data processing 25 digitalizes the recorded measured values with the aid of an analog-digital converter to later make available the digitalized measured values to a microcontroller 26 via a data bus 27. The microcontroller 26 is

digitalized measured values to a microcontroller 26 via a data bus 27. The microcontroller 26 is connected via a cable 28 to a display unit 29, with whose aid the charge state of the lead accumulator 1 can be displayed. The microcontroller 26 is also connected via a keyboard cable 30 with a keyboard 31 and via a bidirectional data line 32 with a data interface 33, wherein the data interface 33 can be connected via an interface cable 34 to control units which are not shown for controlling any processes which depend from the charge state of the lead accumulator 1.

Page 13, second full paragraph:

Between the electrode connecting line 38 and the electrodes 11, 19 is provided a current measuring unit 41, which is connected via a current measuring line 42 with the microcontroller 26. With the aid of the current measuring line 41 it can be determined if a state of equilibrium has been reached. For example, the penetration of sulphuric acid 4 into the immersion tubes 9, 10 can be shown via the current flow displayed by the current measuring unit 42 as a consequence of the hydrogen development on the electrodes 11, 19 ~~can be demonstrated~~. If the measuring unit 42 does not show any current flow, it can be assumed that the system is in a state of equilibrium to prevent in this way uncertainties with respect to the charge state of the lead accumulator 1.

Paragraph bridging pages 13 and 14:

The electrolysis with the aid of the DC-DC converter 35 affects ~~burdens advantageously~~ both accumulator electrodes 5, 6 advantageously in the same measure. The increased DC voltage existing between the opposite electrode 40 and the electrodes 11, 19 expands further the possibility of selecting a suitable material for the electrodes 11, 19, which is limited if ~~with a not increased~~ DC voltage is not increased to materials ~~which are~~ characterized by no hydrogen surge or a negligible hydrogen surge. Even though the materials such as, for example, platinum or palladium meet all the mentioned requirements, their use is however cost-intensive and requires additional expenditures with respect to the connection to an electrode connecting line consisting

Page 15, first full paragraph:

From the adjacent immersion tubes 9, 10, 44 can be measured the average acid densities of different acid layers, wherein the corresponding layer is delimited by the gas depths 21, 22, 48 of the adjacent immersion tubes 9, 10, 44. In the shown configuration of the device 2 ~~[sic - 1]~~ according to the invention, for example, the first immersion tube 9 and the second immersion tube 10 measure the average acid density of a first layer, which is delimited by the first gas depth 21 and the second gas depth 22. A higher-positioned second layer, for example, is delimited by the gas depths 48 of the adjacent immersion tubes 44. The differential pressure sensors 16, 47 are in this way assigned to an acid layer with a known depth, so that the acid layer can be displayed via the microcontroller 26, for example, on the monitor 29.

Page 16, second full paragraph:

Fig. 6 shows another exemplary embodiment of the electrodes 11 according to Fig. 5, wherein the hose insulation 49 is removed in the area of the end of the electrode connecting line 12, which is configured, for example, as a copper wire, and instead is provided with a coating of platinum for forming the electrode 11 ~~12~~. The electrode connecting line 12 is therefore conductively connected to the electrode 11 ~~12~~, wherein the coating ensures a protection from the corrosive sulphuric acid 4.